

REMARKS

This amendment is responsive to the Office Action of September 19, 2008. Reconsideration and allowance of **claims 1-13 and 16-18** are requested.

The Office Action

Claims 1-13 and 16 were rejected under 35 U.S.C. 102(b) as being anticipated by Akram et al. (U.S. Patent No. 6,013,948).

The Present Application

The present application is directed to a device with a body of an electrically insulated material having a first side and, opposite thereto, a second side, electric conductors which are anchored in the body being situated on the first side, wherein the body is provided with a recess extending from the first side to the second side. Additionally, the electric conductors comprise first, second, and third layers, wherein the electrically insulating material extends into cavities in the second layers to mechanically anchor the electric conductors in the body.

One objective of the present application is to increase the compactness of the assembly as well as mechanically anchor the electric conductors within the body of the structure. This compactness shields the electrical elements from the material flowing at the surface, enhances signal integrity, and reduces the electrical losses of the structure.

The above description of the present application is presented to the Examiner as background information to assist the Examiner in understanding the application. The above description is not used to limit the claims in any way.

The References of Record

Akram et al. is directed to a stackable semiconductor package which includes first contacts on a first surface and second contacts on an opposing second surface. A conductive vias in the substrate electrically connect the first contacts to the second contacts. In addition, the first contacts and the second contacts have a mating configuration, such that a second package can be stacked on and electrically

connected to the package. Additionally, the package can comprise of a die mounting cavity, a wire bonding cavity, and an interconnect opening.

**The Claims Distinguish Patentably
Over the References of Record**

Claims 1-13, 16, and 17 are not anticipated by Akram et al. (U.S. Patent No. 6,013,948).

More specifically, regarding **claim 1**, Akram et al. does not disclose the claimed device having “electric conductors which are mechanically anchored in the body being situated on the first side” and “wherein the electrically insulating materials extends into the cavities between patterns in the second layer to mechanically anchor the electric conductors in the body situated on the first side.” The Examiner refers Applicant to Figure 1-10 and more specifically reference characters 11, 12, 14, 16, 18, 22, 26 which discloses stackable semiconductor package which includes a die mounting cavity, a wiring bonding cavity, and an interconnect opening between the two. More specifically, Examiner refers applicant to reference character 22, the inside of reference character 26, and the bottom of reference character 26 to disclose and teach the electronic conductors comprising a first, second, and third layer. It is respectfully submitted that Akram et al. does not disclose a first, second, and third layer of an electronic conductor: reference character 22 makes reference and discloses wires which establish an electronic connection between a conductor layer and the die contacts and reference character 26 makes reference and discloses a conductor layer which establishes electrical communication between the second contacts and the wires. Additionally, Examiner asserts that the second and third layer of the electric conductor is disclosed in Akram et al. as the bottom of reference character 26 and the top of reference character 26. Akram et al. discloses a single conductive layer that is formed on the sidewalls of the etched laser vias which is used to electrically connect the second conductors to the wires of the die contacts. It is respectfully submitted that Akram et al. does not disclose an electric conductor having first, second, and third layers.

Even assuming *arguendo* that reference characters 22 and 26 disclose an electric conductor having first, second, and third layers, Akram et al. does not disclose that the second layer defines cavities into which the electrically insulating material

extends to mechanically anchor the electric conductors in the body. Examiner asserts reference character 11 of Akram et al. discloses cavities between patterns in the second layer which mechanically anchor the electric conductors in the body. It is respectfully submitted that Akram et al. does not disclose, teach, mention, or make reference to a reference character 11 or to a cavity between the patterns in the second layer of the electric conductor in order to mechanically anchor the electric conductor.

Accordingly, it is submitted that independent **claim 1** and **claims 2-13, 16 and 17** that depend therefrom, distinguish patentably over the references of record.

New claim 18 has been added to present similar concepts in a more conventional U.S. claiming style.

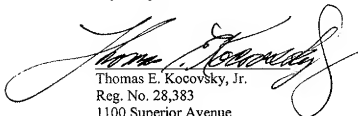
CONCLUSION

For the reasons set forth above, it is submitted that **claims 1-13 and 16-18** (all claims) are not anticipated by the references of record and meet all statutory requirements. An early allowance of all claims is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case(s), he is requested to telephone Thomas Kocovsky at (216) 861-5582.

Respectfully submitted,

Fay Sharpe LLP

A large, stylized handwritten signature in black ink, which appears to read "Thomas E. Kocovsky, Jr.", is written over the printed name and address.

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